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ABSTRACT

Major criticisms of teacher education in Canada reveal the following problems: (1) The time provided for teacher preparation is too short; (2) Programs and faculty are insufficiently oriented to modern research in education; (3) Curriculum design too often reflects teacher educators' interests rather than teachers' needs; (4) Response to the changing roles of teachers and functions of the schools has been too slow and erratic; and (5) Pressures of enrollment decline and inadequate financing distract faculties from accomplishing their mission of improvement of elementary and secondary education. Further demands on teachers and teacher education programs stem from social problems and concerns, extension of the teacher's role, special interest groups, and declining enrollment. Institutional responses to these and other current problems are described. The functions and responsibilities of active teacher associations in various provinces are pointed out as reflecting an attempt to increase the relevancy of teachers' preservice, inservice, and continuing professional education. Suggestions are also made for changing and improving teacher education curriculum in the universities. Appendices present a selective summary of a decade of educational research, teacher education and certification policies of the Canadian Teachers' Federation, and 82 selected references on teacher education. (JD)

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The Relevance of Teacher Education

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SP 018 454

THE RELEVANCE OF TEACHER EDUCATION

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Teacher education today presents a formidable challenge to both policy-makers and curriculum designers. In its broadest aspect, teacher education faces the same problems as the schools it serves -- i.e., how to choose from the whole array of the world's knowledge the selection of information and skills which will most benefit its clients.

In addition, teacher education works within much more stringent time constraints. While the predominant preparation pattern in Canada is the four-year Bachelor of Education, which may contain up to two years of professional content, the largest province and largest producer of teachers, Ontario, still adheres to a pattern which involves only one academic year of professional studies (although that year now follows a university degree, rather than high school graduation, as it did a decade ago.)

The time constraints only add to the discomfort of the teacher education institutions, which also face a large number of demands from various sectors. These demands fall into three main groups -- the demand for participation, which comes principally from teachers and departments of education; the demand for adoption into the program of new objectives,

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knowledge and technologies, which comes from all sectors of the education community; and the demand for greater adjustment to changing social conditions (such as multiculturalism and mainstreaming of the handicapped), which comes from the whole society.

The loss of clientele brought about by declining enrolments has added still further complications. The diminishing demand for new teachers, combined with financial restraints, has been forcing faculties into a determined defence of their citadels through such means as diversification of program to serve clientele other than teachers and development of inservice programs to which they hope to attract a stable and maturing, but rather demoralized, teaching profession. It has been pointed out that university professors constitute a little group of entrepreneurs held together by a common concern for parking.[1] As the parking spots near the faculties empty it seems only reasonable to suppose that the entrepreneurial spirit endemic to academic life will become stronger and more fantastic in its manifestations.

Stability and Change in Teacher Education

Teacher education has, of course, since its very beginning, never been free of controversy, criticism and demands for change. In view of that situation, it is perhaps remarkable how little change has occurred over the past century in the basic curriculum outline for teacher education. Table 1 summarizes that outline and indicates the eras in which each element has been part of the compulsory core in at least some, if not all, teacher education institutions.

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[1]Clark Kerr, as quoted in John F. Ellis, The Central Purpose of a Faculty of Education, Teacher Education 12:4 April 1978.

Table 1. The Basic Pre-Service Teacher Education Curriculum

	1890	1950	1980
History, philosophy and sociology of education	X	X	X
School organization, law and management	X	X	X
Methods of teaching	X	X	X
Remedial courses in school subjects	X	X	
Psychology, educational psychology, child development	X	X	X
Communication			X (some institutions)
Measurement and evaluation			X (some institutions)
Practice teaching	X	X	X

Psychology and other foundation subjects, methods, school administration and practice teaching -- these, it would seem, are indeed the basics in teacher education, the inescapable inner core to which all other claimants must be attached. The inescapability of this common core is perhaps once again demonstrated in the policy on core curriculum for teacher education adopted by the Canadian Teachers' Federation in 1979:

The required core content of teacher education programs should include at least the following elements:

(i) General teaching skills

(ii) Communication skills (both written and verbal)

(iii) Classroom management

(iv) Setting of instructional goals

(v) Testing and measurement, evaluation, and reporting to parents and others

(vi) Methodologies appropriate to specific subjects or areas of concentration

(vii) Teaching of the language arts

(viii) Introduction to special education and specific learning problems

(ix) Child development and learning processes

(x) Social and cultural environment of schools and communities

(xi) Historical and philosophical background to education

(xii) The teacher's legal status

(xiii) The teacher as a member of an organized profession.*

As may be observed, this list too contains the time-honoured curriculum outline, but emphasizes or adds such elements as classroom management, evaluation, language arts, special education and the professional status of teachers.

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* The full text of CTF's policy on teacher education appears in Appendix B.

It is, of course, unfair to suggest that nothing has changed in a hundred years (although the harshest of critics have advanced this view). Considerable change has occurred, most of it in a positive direction.

For example, the length of time devoted to professional content has increased from a few weeks, or a few months, to a year or a year and a half, and is slowly stretching toward the two-year minimum now recommended in CTF policy. Similarly, the length of the practicum, once confined to a few days or weeks, has now in some institutions met the semester-length standard first enunciated by CTF nearly a decade ago.

Of considerable significance has been the shifting of responsibility for teacher education from normal schools to universities, a process which began in Alberta in 1945 and will finally be complete once the fate of the Nova Scotia Teachers College is determined. A dramatic upsurge in basic teacher qualifications has accompanied the move to the universities. In 1960-61, 26 per cent of teachers held degrees. In 1979-80, 75 per cent held degrees.* A trend toward more advanced training has also been established; in 1979-80, 8 per cent of teachers held a master's degree or better, compared with 6 per cent in 1972-73.* Tables 2 and 3 trace the growth in qualifications for the provinces and territories of Canada.

The curriculum, while appearing to remain the same, has nevertheless undergone some change. The emphasis on foundations courses, particularly history and philosophy, has diminished. Remedial courses, if they have not entirely disappeared, have at least been well disguised. It seems

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*Figures do not include Quebec

Table 2. Per Cent of Teachers with University Degrees, 1960-61 to 1979-80

Year	Nfld.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Total*
1960-61	11	7	24	14	27	26	17	28	37	15	28	26
1961-62	11	8	25	15	32	25	18	30	37	18	28	28
1962-63	12	8	26	15	30	26	20	31	39	25	27	28
1963-64	13	11	27	..	32	27	21	34	40	23	25	30
1964-65	13	11	28	19	33	28	23	36	42	24	26	31
1965-66	14	12	30	20	34	29	..	38	44	26	27	33
1966-67	15	15	32	21	34	31	28	42	46	34	28	34
1967-68	18	19	35	24	35	33	30	44	48	36	35	36
1968-69	22	20	38	27	..	36	33	49	51	42	38	40
1969-70	26	25	39	33	..	38	34	53	54	45	41	43
1970-71	32	29	43	38	..	41	40	58	57	51	46	48
1971-72	39	36	46	43	..	49	43	63	60	55	48	52
1972-73	45	39	47	48	47	54	47	68	62	68	51	52
1973-74	52	..	50	52	53	60	53	74	67	68	54	57
1974-75	56	48	52	57	58	65	56	78	70	63	61	62
1975-76	60	57	55	63	54	69	57	81	72	67	62	61
1976-77	63	60	56	68	57	73	61	84	75	70	65	64
1977-78	66	62	57	73	68	77	64	87	76	73	70	71
1978-79	69	66	59	77	69	80	68	90	78	77	71	73
1979-80	72	68	60	81	71	82	71	91	79	81	74	75

Source: Statistics Canada. Salaries and Qualifications of Teachers in Public Elementary and Secondary Schools. Annual. Ottawa: Supply and Services.

* Total excludes P.E.I., 1973-74; Ontario, 1968-69 to 1971-72; Yukon and NWT, years prior to 1972-73; N.B., 1963-64; Sask., 1965-66; and Quebec, all years.

Table 3. Per Cent of Teachers with Master's and Doctor's Degrees, 1972-73 to 1979-80

Year	Nfld.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Total*
1972-73	3	3	6	4	6	5	2	6	7	4	4	6
1973-74	4	..	7	4	7	6	3	7	8	7	3	7
1974-75	5	5	6	5	8	6	3	7	8	6	4	7
1975-76	5	6	6	6	8	6	3	8	9	7	5	7
1976-77	6	6	6	6	8	7	3	8	9	8	4	7
1977-78	6	7	6	7	8	7	4	9	10	8	5	8
1978-79	7	9	7	7	6	8	4	9	11	7	5	7
1979-80	8	10	7	8	8	8	4	9	12	8	6	8

Source: Statistics Canada. Salaries and Qualifications of Teachers in Public Elementary and Secondary Schools. Annual. Ottawa: Supply and Services.

* Total excludes P.E.I., 1973-74 and Quebec, all years.

probable, although perhaps cannot be proved, that the traditional content, especially in methods courses, is now treated in a more sophisticated fashion. Graduates have even been known to express some satisfaction with methods courses, as well as with the practicum.[2] The curriculum has also been broadened to allow students to choose from an array of options, many of which clearly reflect contemporary concerns in education (although some seem more closely tied to the particular interests of individual faculty members). Some institutions have pursued this route to such a degree that virtually no content is preferred, or selected as basic.

Many institutions have also made a sincere attempt to work more closely with teachers, particularly in regard to the practicum, but sometimes in regard to program as well. Efforts have been made to provide training for cooperating teachers, and to give cooperating teachers more responsibility for evaluation of student teachers.

Despite these changes, dissatisfaction with teacher education still remains, as do the debates over certain central themes in teacher education. Teacher education still carries the stigma of requiring students to absorb dull and irrelevant theories which offer little of assistance to the budding practitioner. This continuing dissatisfaction is part of the unending debate over theory vs. practice in teacher education.

Part of the problem in the theory-practice debate is that the social sciences on which education relies are not so well advanced as to have generated many powerful, empirically verified theories. In consequence,

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[2]T.F. Rieger and Sandra Woods. Teachers' Evaluation of Their Preparation for Teaching. Edmonton: Alberta Teachers' Association, 1971. p. 15

no general theories have been developed for education from which productive practices might be readily derived or inferred. Moreover, the development of some branches of psychology, particularly learning theory, has proceeded in a path which has kept researchers and theorists quite remote from natural classroom environments.[3]

As well, the time constraints within which teacher educators work virtually ensure that foundations courses will be limited to historical surveys of thought within the parent disciplines and that they will be offered at a point in the program where students are preoccupied with gaining minimal competence in teaching skills and do not wish to be distracted by any theoretical or philosophic considerations.

Another problem in the theory-practice debate is its lack of specificity. What theories are we talking about? What practices?

Are the theories those which, like Bloom's mastery learning, have been substantiated through empirical study, or are they theories which reflect beliefs about how education should be (e.g. open, or individualized), theories which lack precision and are therefore less open to empirical verification?

It may be that faculties have done themselves a disservice, and left themselves open to charges of irrelevance, by defending theory in general,

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[3]See, for example, the discussions by Ernest R. Hilgard, Psychology's influence on educational practices: a puzzling history, Education 97:203-219 Spring '77 and Harry S. Broudy, The search for a science of education, Phi Delta Kappan 58:104-11 Sept. '76.

as if all theory were equally good, instead of selecting and focussing upon those theories which do explain and can be related to practice. Moreover, they have failed to acknowledge sufficiently the many good practices for which theoretical explanations have not yet been provided.[4] One can only conclude, as did the CTF position paper on teacher education, that considerable reform must be undertaken in the foundations to ensure that they do serve the purposes which justify their inclusion in teacher education programs.

A final comment on the theory-practice dilemma is that the research base for teacher education, thought to be almost non-existent a decade ago, has lately shown signs of developing and strengthening. In fact, the research has become so bulky that reviews are now being made of reviews, rather than original studies. A convenient and recent summary of this research, by Herbert Walberg, is attached as Appendix A to this report. A review of the integration of these findings within Canadian teacher education programs might provide some inkling of the extent to which the programs have moved toward a definite integration of theory, research and practice.

There are other debates that also continue. For example, how should the time devoted to the practicum be used? Teachers have argued that a major portion of the time in the lengthened practicum should be spent in

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[4]See, for example, James T. Sanders and John E. McPeck. Theory into practice or vice versa? J Ed Thought 10:188-193 Dec. '76.

one school or classroom, so that the student may have a genuine experience of school life. Faculty members have argued just as hard that practicum experiences should be varied, since the teacher education program may offer the only opportunity for the teacher to encounter a number of different grade levels and school situations.

The role of the cooperating teacher is fraught with ambiguities. Is he or she to be a formative influence, or the guardian of the gates to professionalism, charged with the sacred duty of screening out the unfit? Is he or she to be an equal status partner in the practicum, or a supervisor paid on a piecework basis? Is the instruction of student teachers a contribution to the teacher's own professional development, or simply a duty mandated by law?

Today's Demands

These long-standing debates can perhaps never be resolved to everybody's satisfaction. Today, however, they are aggravated by two new sets of demands on faculties of education:

1. New demands on schools and teachers, which inevitably translate into new demands on faculties
2. Simultaneous direct pressure on the faculties to reduce enrolments and re-orient programs as means of adjusting to the lack of demand for new teachers.

Table 4 is an attempt to draw together a summary of these demands. The list is termed "incomplete", since it seems likely that every person here could add substantially to the list presented.

Table 4. An Incomplete List of Today's Demands on Teacher Education

Source of Demands	Types of Demands
Social Problems and Concerns	Contribute to national unity through Canada studies courses and preparation of bilingual and second-language teachers Combat prejudice through emphasis on multiculturalism Provide opportunities for native peoples to upgrade their education Diminish sexual discrimination and stereotyping Provide enhanced opportunities for gifted, handicapped and disadvantaged children Accommodate new curricula in environmental, outdoor and life skills education
Extension of the Teacher's Role	Train teachers for competent performance of the following roles: Developer of curriculum Counsellor of students and parents Consumer and producer of research Mainstreaming of handicapped children Sophisticated measurement and evaluation Classroom applications of new technologies Paramedic responsibilities
Special Interest Groups	Respond to the views of parents, teachers, departments of education, school boards, child advocacy associations and other groups with special interests in education or some aspect of education
Reorientation Made Necessary by Declining Enrolments	Expand graduate programs, make them more flexible and teacher-oriented Prepare teacher specialists in various fields Provide inservice training for teachers Provide retraining for teachers Reduce preservice enrolments Retrain faculty to offer new courses Refurbish faculty through periods of classroom experience Upgrade research activities Stiffen entrance requirements Lengthen preservice programs Provide training for college and university instructors Train individuals for educational roles outside the public school system — e.g., adult educators pre-school educators nurse tutors child care workers industrial trainers police educators school social workers

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The first set of demands in Table 4 is identified as arising from several problems in Canadian society. Given current concerns regarding national unity and constitutional reform it is hardly surprising that there should be continuing pressure on the schools, and in consequence the faculties, to make a contribution to national unity through promoting study of Canada and its heritage, through fostering greater appreciation of the cultural contributions of French and English settlers, and through establishment of ample opportunity for unilingual Canadians to learn the other official language (a problem intensified for English-speaking Canadians by the fact that so many are so geographically distant from centres of French language and culture).

Accompanying the concern with bilingualism and biculturalism has been the rising concern for protection from discrimination, and preservation of the cultural heritage of, large concentrations of Canadians whose roots lie outside the French-English framework — in the Ukraine, in Italy, in Pakistan, and elsewhere. Also part of the multiculturalism movement has been the concern for improving educational opportunities for native children through curriculum reform, parental control of schools, and training of native teachers.

There has also been an intensification of concern for those children who are in some way "different", or "special" -- through poverty, through mental or physical handicap, or even through possession of outstanding creative and intellectual abilities.

And finally, there has been the development of new directions in school curriculum, towards the teaching of such matters as life skills

and environmental concerns, which are believed necessary to the future well-being of both individuals and society.

This total cluster of social and educational concerns has many implications for the further development of teacher education, both in the revision of undergraduate programs and in the design of new programs of professional development and graduate study.

The second group of demands arises from the changes in the teaching role which have already occurred or are perceived by some observers as being necessary.

For a decade or more earnest attempts have been made both to give to teachers and to gain for teachers more responsibility for the development of curriculum suited to local needs. Although there has been some trend of late to reassert central control over curriculum, it seems unlikely that the trend toward teacher participation in curriculum development will be entirely reversed. Some teachers have welcomed the curriculum development role and responded enthusiastically to it; others have shied away, not only because it is a time-consuming activity, but also because they doubt the sufficiency of their formal preparation for that particular role.

An associated responsibility which teachers have assumed is greater discretion in evaluation of students. It is now some years since most departments of education in Canada ended the practice of imposing external

examinations at the conclusion of high school and at other grade levels in the system. This enhanced responsibility for summative evaluations affecting the future prospects of their students has, again, raised doubts in teachers' minds as to the adequacy of their preparation for this serious task.

Teachers are also being expected to become at least consumers, and preferably producers, of research. While it seems both reasonable and desirable that teachers be in touch with the scholarly literature of their field, it must be remembered that there are many barriers to be removed before this goal can be achieved. Study of undergraduate programs does not provide any assurance that new teachers are being systematically introduced to research in their field, or to the background knowledge in research design and statistics that would enable them to become intelligent consumers and critics of research. For teachers already in service, the intellectual and attitudinal barriers are further aggravated by the geographical separation between teachers and existing centres for advanced study. Clearly, this is not a readily solved problem. Nevertheless, if teachers are to rise above the craftsman stage and achieve full professional status, some means must be found of bringing the researcher and the practitioner into closer touch.

Another extension of the teacher's role is the demand for mainstreaming of children with mental, behavioral and physical problems. Noble and egalitarian as this movement may be, it is nevertheless a demand which many teachers do not feel sufficiently well prepared to meet. There is even some suggestion in recent research that the demand on teachers to

accommodate this change is one of the more important sources of the stress which teachers perceive themselves to be under.[5]

Although the early enthusiasm for replacing teachers with teaching machines has faded, the demand remains for teachers to view themselves as part of a "soft technology" which employs methods verified through research to achieve educational objectives.[6] This particular extension, or re-definition, of the teacher role is double-edged, since it offers the prospect both of legitimating professional practice and of destroying the teacher's autonomy in choosing among competing instructional strategies. A new enemy looms on the scene now too -- the inexpensive computer, with all its capacity for interaction and remote communication. Will the wired city concept of education, with the children all home by their computers, become the new goal of overzealous reformers?

Finally, one may remark that a further extension of the teacher's role has been creeping in, almost unnoticed. This is the demand that teachers become more and more involved with the medical condition of their students. In Ontario, teachers are now obligated to report suspected cases of child abuse to the proper authorities. A recent report on teacher education in British Columbia noted the demand that teachers become expert in first aid.[7] We are all aware that there have been

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[5]See, for example, Donald J. Cichon and Robert H. Koff, The Teaching Events Stress Inventory, paper presented to AERA March 1978 (ED 160 662) and Carroll M. Brodsky, Long-term work stress in teachers and prison guards, J Occupational Medicine 19:133-137 Feb. '77

[6]See, for example, W.T. Weaver, 1984: a revision of the vision. Teacher Education 15:89-96 Oct. '79.

[7]The Education and Training of Teachers in British Columbia. Report to B.C. Ministry of Education. Victoria, 1978, p. 17.

attempts to involve school authorities in the administration of ritalin and tranquillizers to hyperactive and disturbed children. And lately there have been suggestions that classroom teachers assume responsibility for administering drugs for the control of such conditions as diabetes and epilepsy. Some of these demands approach, and undoubtedly cross, the borderline between home remedies and unlawful practice of medicine. While these duties may appear to be implied by the extension of equal educational opportunity to all children, or to arise from the geographic isolation of some schools, they nevertheless raise legal and, in some cases, moral questions which need to be resolved before such duties become routine components of the teacher's responsibilities.

These demands for extension of the teacher's role suggest that there are <u>two</u> questions in this area — not just what should faculties of education do about them, but whether teachers should accept all of these extensions of their traditional instructional role in the first place. As a partial answer one might cite the work of Dr. John Macdonald, a social psychologist who was commissioned by CTF in the late 1960's to identify the central dilemmas in teacher education and to recommend resolutions. Macdonald grappled with this problem for some time, eventually coming to the conclusion that "much of what is wrong with education today can be traced back to a single origin, and that is the conventional description of the teacher".[8] He pointed out that "Teachers are invited to refer themselves to an omnicapable model... They are told that they must be specialists in an academic discipline, masters of the techniques of presentation, adept class managers, artful motivators, skilful

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[8]John Macdonald, <u>The Discernible Teacher</u>, Ottawa: Canadian Teachers' Federation, 1970, p.41.

diagnosticians, ingenious remedial workers, imaginative curriculum designers, eager inquirers, efficient administrators, helpful colleagues, widely interested citizens, and loving human beings."[9] Macdonald proposed that the omnicapable teacher be replaced by the functional specialist, acting as a member of a team of specialists.

In the decade since, one may have remarked some trend to greater specialization in teaching roles. However, there is little reason to suppose that the "omnicapable" model has been abandoned. If anything, it has strengthened, and the cries of frustration at the sheer impossibility of that role model have grown louder. Here is what one observer had to say in a recent article:

> ...Through all this, the teacher training institutions continue to 'prepare' young people to teach in a manner which only guarantees their failure by assuming that 'more facts, some methods, and some materials' will still equip them to teach. WHAT is supposed to prepare them to be amateur social workers, counsellors, therapists, vocational selectors, job placement agencies, surrogate parents, sex educators, values clarification experts, bureaucracy battlers, unbiased models for a multi-cultural society, referees of constant aggression, and entertainers who can provide strong competition for TV and films?
>
> If it is not possible -- and I suspect it is not -- to divest schools of the enormous social responsibilities which they now carry, then at the very least it is necessary to begin to train

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[9] Ibid.

people to work in a variety of roles within the schools -- not as consultants, but in direct daily contact with children: as psychologists, as child care workers, as family therapists, as vocational skills trainers, as mental health workers, as ESL experts, as social workers, as recreation specialists -- and let the person who wants to TFACH concentrate on a more finite and thus perhaps achievable task.[10]

The third group of demands is by no means entirely new. However, the pressures of declining enrolments have encouraged various groups to seek greater control over teacher education. In some provinces, departments of education have become more involved in setting standards for teacher education. Each of these provinces is doing this in its own way, of course, some through commissions of inquiry with public hearings, some through existing consultation mechanisms, and others through evaluation studies conducted on a confidential or semi-confidential basis.

Teacher organizations, for their part, have long sought greater participation in decision-making regarding teacher education and have in some cases advocated control of certification and related matters. In view of the repeated failure of teachers to achieve self-governance in the past, the announcement in the summer of 1980 that the Ontario Ministry of Education would seriously consider according the teachers of Ontario self-governing powers came as a considerable surprise. The Ontario Teachers' Federation is now engaged in intensive study of issues raised by the prospect of self-governance. In effect, they are asking themselves if these are powers they truly want, or can afford to accept.

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[10] O. Weininger, Hey teacher! what are we supposed to learn today? Teacher Education 15:19-20 Oct. '79.

Even more of a shock was the announcement in February 1981 that the Alberta government was imposing self-governance on the Alberta Teachers' Association -- self-governance with all the powers over certification, teacher education, discipline and competence that it implies, but at the cost of splitting the association into two parts, one the professional wing, the other the bargaining group. The ATA has consistently rejected the split model of professionalism, maintaining that teachers have proved themselves capable of housing under one roof the twin goals of improving educational standards and protecting teacher interests. Alberta teachers are gearing up for the fight of their lives to prevent implementation of the new legislation. It is a considerable irony that the ATA, which has pursued self-governance with more vigour than perhaps any teachers' organization in Canada, must now reject that long-sought goal because the form in which it is offered is not acceptable.

British Columbia may be next on the self-governance list. And there are vague hints that other governments may have it in mind for their provinces as well. I might say that in Canada we tend to get a little paranoid about that slightly mysterious body, the Council of Ministers of Education. But isn't it just a little bit too much of a coincidence that one association after another is being offered self-governance -- the golden ideal which nevertheless brings with it the potential for dividing the teaching profession, weakening its bargaining power, increasing its costs of operation and imposing demands for accountability which might make today's controversies over teacher evaluation look pale by comparison.

The achievement by teachers of full professional status and powers, if it occurs, may well have profound implications for teacher education, the future development of the teacher organizations themselves, and the further shaping of educational programs and practice.

The final set of demands outlined in Table 4, relating to declining enrolment, arises from two main sources, teachers and faculties, whose interests at some points may be in conflict. As has already been mentioned, teachers have every reason to argue that the resources which are not at present required for pre-service education should be re-directed to the in-service and continuing education programs which they see as necessary both for revitalization of their practice and for job protection. Nor are the faculties opposed to this position. However, the nature of university funding creates difficulties. Since university funding is tied to enrolment, faculties cannot afford to reduce pre-service enrolments too drastically. Hence many have found it necessary both to keep the doors open to prospective teachers and to promote their programs as suitable preparation for other occupations which have some educational flavour to them but are not part of the public system. The CTF policy adopted in 1979 was sympathetic to the faculty position on related occupations. Nevertheless, there were reservations, not only about the suitability of teacher education programs for the purposes stated, but also about the long-term consequences of diverting faculty efforts into areas more or less remote from elementary and secondary teaching.

Institutional Responses to New Demands

It is not possible in all cases to find a clear pattern of faculty response to the concerns that have been outlined in the preceding section. The program effects of concerns about bilingualism, biculturalism and multiculturalism are difficult to detect. Moreover, some demands have been handled simply through the "add-a-course" philosophy of curriculum development, rather than through redesign of program. On the other hand, special training programs for native people have become well-established at a number of institutions and provision has been made for study of new curriculum in environmental studies and outdoor education.

Of particular interest has been the proliferation of special education programs in the past few years. A decade ago only a few institutions offered programs, or even courses, dealing with various aspects of special education. In a study conducted in 1980, however, CTF discovered that the 50 teacher education institutions in Canada were offering 9 undergraduate concentrations, 12 special education bachelor's degrees, 7 special certificates, 6 graduate diplomas, 11 master's programs and 6 doctoral programs, involving nearly 1000 distinct courses.[11] This expansion in special education appears somewhat remarkable in an enterprise which employs less than 3000 full-time professors.

A glance through the special education course titles and descriptions suggests that this development has been accompanied by some of that

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[11] Canadian Teachers' Federation, Special Education Programs Offered by Canadian Universities. Unpublished catalogue of programs and courses. 1979. 221 p.

"exuberance of nomenclature" to which Hildy Neatby referred in her 1953 critique of teacher education.[12] Special education students may now choose to study "classroom diagnosis of communication dysfunction," or "psychopathology and remediation of interpersonal and behaviour disorders". There is even a course for sceptics, entitled Myths in Special Education, which proposes to consider diagnostic approaches which lead to "suspicion confirming" and "pigeonholing" of the child and to examine alternatives to special and remedial education.

Revision of curriculum to account for expanded interpretations of the teacher's role does not appear to have taken place universally. However one can find traces of this influence in the compulsory core of some programs. For example, in some Canadian programs there are required introductory courses in measurement and evaluation, curriculum development, and special education. As well, there is sufficient choice of options in many programs that the possibility of studying these and other topics is at least open to students. What one tends to notice in looking at descriptions of programs, however, is that the courses which make one pause and say "Now there, that sounds like just the right thing!" appear, for the most part, in graduate diploma and degree programs, not in undergraduate and initial certification courses of study.

It was reflection on this state of affairs that led CTF to the conclusion that it is really not possible for even the best-intentioned of faculties to offer a program incorporating both a lengthy practicum and a suitable quantity of highly technical studies in one year. In

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[13]Hilda Neatby, So Little for the Mind, Toronto: Clarke, Irwin, 1953, p. 88.

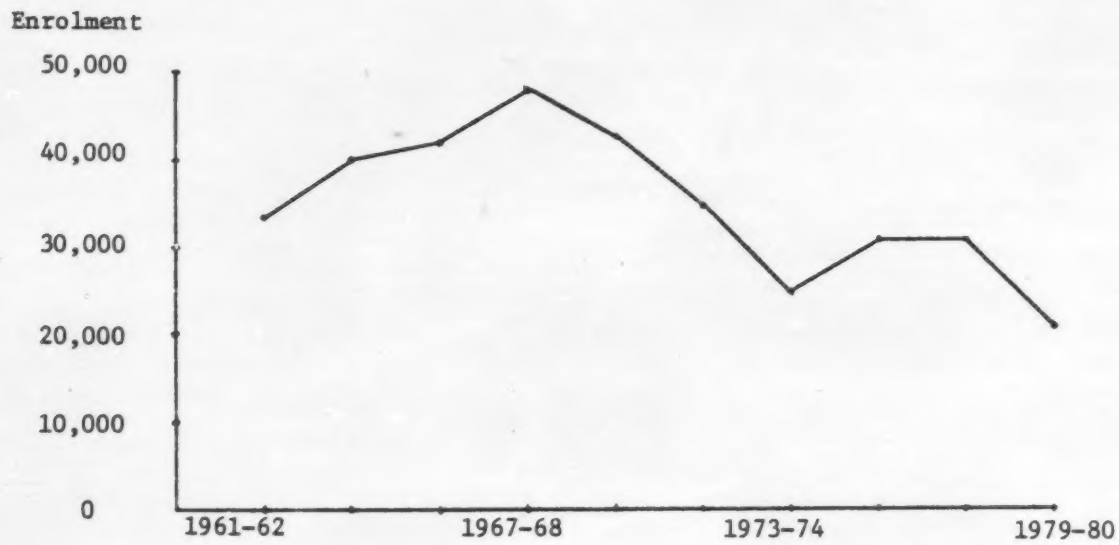
consequence, the Federation has adopted a recommendation that the minimum length of the professional component of the teacher education program be two years.

It is difficult to determine how quickly this recommendation might be implemented. Some institutions recognized this viewpoint a number of years ago by requiring two years of study for a postgraduate B.Ed., despite the fact that only one year is required for certification. Only one province, Saskatchewan, has as yet altered its certification regulations to require more than a year of professional studies. As of September 1980, applicants for Saskatchewan's Professional A certificate must demonstrate that they have had at least one and one-half years of professional study, either within or after an undergraduate degree.

This is little evidence to suggest that teacher educators in Canada have responded to the need to develop a research orientation in beginning teachers. Many seem, in fact, to reject modern research as a form of behavioral engineering -- i.e., as an attempt to diminish teaching to a mere technology, devoid of those humanistic concerns which they value most highly. As researchers, they often seem trapped in modes of research focussing on personality characteristics and supervisor ratings -- research modes long since discredited and abandoned by the main body of researchers. Nor are the libraries of the faculties of education reassuring. All too often the faculty library holds only the "how to" books and popular periodicals. The research books and journals are reserved to the academic library, housed at some remote location on campus.

The response of the faculties of education to the exigencies of declining enrolments has, not unexpectedly, been in some respects defensive. As has already been pointed out, it was not in their best interests to restrict enrolments. Moreover, departments of education seemed to feel, first, that the problem wasn't very serious and, second, that it would be advantageous to the system to have a large pool of applicants from which to select new teachers. Figure 1 outlines the trend in teacher education enrolments from 1962-63 to 1979-80. Lack of attention to long-range planning seems evident in the fact that enrolments, which had subsided to 25,000 in 1973-74, were permitted to rise again to 33,000 in 1976-77. Enrolments have since fallen in most provinces, including those which have not been overly affected by declining enrolments and have, in fact, begun to experience some shortages of teachers.

Figure 1. Teacher Education Enrolments
1961-62 to 1979-80



Many faculties have responded to the urging that admission standards be tightened. One now finds that faculties are requiring not only academic standing, but also autobiographical data and prior experience with children. Some also require interviews and tests of ability in speech and writing. The standards set are, however, still not as high as those in, say, Norway, where it is claimed that because of excellent admission procedures 97 per cent of those admitted complete the program, very few graduates subsequently leave the profession and few complaints about competence are received from parents and administrators.[13]

Response to the demand that faculty become more involved in in-service activity has so far been more fragmentary than focussed. Continuing and in-service education for teachers in Canada is not a well-defined field of activities. One sees proposals for graduate diplomas, for utilization of the "Continuing Education Unit" concept, for development of teacher centres, and so on. But no clear picture seems to emerge as to what should be done and who should do it.

Part of the problem seems to be that, while teachers, professors, school boards and ministries of education all agree that teaching must be regarded as a lifelong learning activity, each group is convinced that it should have the primary decisionmaking power over content and delivery systems. Another part of the problem is that there has been no significant commitment of resources to inservice education. Departments

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13 John Dullaert, Norwegian elementary school teacher preparation, Phi Delta Kappan 59:462-463, March '78.
For a Canadian discussion of admissions policy see Kevin A. Wilson, Matching supply of teachers with market demand, OCLEA 14:9-11 Autumn'78.

of education seem more intent on financial restraint than on expansion of program. School boards are reluctant to provide teachers with more released time. Teacher organizations can provide only a limited number of seminars and workshops. And university funding is not geared to in-service work, particularly that which takes the mini-course, weekend workshop format which many teachers might prefer.

One is forced to conclude that, no matter how desirable it may be to involve the faculties in continuing education activities, the shifting of resources that is required to facilitate that involvement will not be achieved easily.

The Future Outlook for Teacher Education

However uncomfortable the situation may be for teacher education at the present time, there is at least some consolation in the fact that, over the long run, the discomfort will be temporary. Inexorable demographic trends suggest that by the middle of the next decade large proportions of the current teaching force will begin to retire, creating a demand for new teachers that should continue for at least 15 years.

A rescue that is more than ten years off is, however, in human terms no rescue at all. In consequence, it is not idle to speculate on possible positive and negative effects of faculty attempts to survive and change during the retrenchment period.

Among the positive effects will probably be some further lengthening of the time devoted to professional studies. Programs requiring only one academic year will probably disappear, to be replaced by programs requiring at least a full calendar year of study. The next decade may, as well, see universal implementation of the extended practicum.

The gradual lengthening of the time devoted to teacher education raises the question of what the ultimate destination for teacher education may be. It seems at least possible that faculties of education will eventually become schools of education, offering 3-year professional programs following an undergraduate degree heavy in such prerequisite courses as psychology, sociology and statistics. This model already exists, in embryo, in Ontario. But one can also detect its faint outline in provinces where the integrated B.Ed. predominates. Institutions in those provinces have begun to require completion of first year arts or science prior to entry into the faculty of education. Perhaps the integrated B.Ed. has been only a resting place on the way to a more prestigious preparation model, of the type exemplified by medicine and law. The resources required for this development would be so large, however, that it may not be accomplished in this century, and perhaps not even in the next.

Some institutions may also attempt a guided internship or similar form of graceful induction of beginners into the profession. However, one cannot expect this in areas where the beginner is apt to be declared redundant the next year.

The demand for inclusion of required courses in measurement, special education and similar topics in pre-service programs will probably be met by more institutions over the next decade.

Some faculties will undoubtedly move into new graduate programs offering teachers better opportunities for specialization. However, while it would seem desirable that some faculty attention be diverted to research during the period of retrenchment, it is not evident that the funds for this endeavour will be forthcoming.

There is no doubt that faculty will seek more participation in in-service education, and will try to develop modes of delivery, credential systems, and needs assessment techniques to help make their offerings more appealing to teachers.

The question of in-service education, however, also raises the possibility of negative effects of faculty adjustment to change. A number of government-sponsored commissions have in recent years proposed implementation of compulsory re-certification schemes for teachers. There is every reason for faculties of education to support this idea. In fact, in a recent article, one professor said it quite bluntly:

> ...Provincial ministries could even require that approved courses be taken at regular intervals during a teacher's career in order to maintain certification.

> A combination of such arrangements would mean teachers could participate in professional development programs organized by the universities on a regular basis.[14]

This comment seems to reflect little understanding of how teachers feel about continuing education, and to be out of place in an article directed toward assessing how universities might attract teachers to their programs. The prospect of teacher self-governance gives an ironic twist to the re-certification debate. Is it possible that the teacher organizations, given the power, might themselves impose some form of compulsory continuing education?

Another possible negative effect of the reorientation to declining enrolment lies in faculty determination to promote their programs as preparation for non-teaching occupations. If specific programs should be developed, and faculty retrained to provide them, one could expect faculty attention to drift well away from the elementary-secondary world that the colleges and faculties of education were originally established to serve.

The final concern, of a long-range nature, is the question of whether the faculties, having diverted their resources to graduate and continuing education, to research, and to a variety of other activities, will be ready for the resurgence of demand for pre-service preparation that seems likely to occur before the end of the century.

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[14] Ann Manicom, The role of the universities in continuing teacher education, J ED (N.S.) 6:20 Spring'79.

Conclusion

In this article I have tried to bring forth the major criticisms of teacher education. Let me sum them up.

The time provided for teacher preparation is too short

Programs and faculty are insufficiently oriented to modern research in education

Curriculum design too often reflects the interests of faculty rather than the needs of teachers

Response to the changing roles of teachers and the changing functions of the schools has been too slow and too erratic

Pressures of enrolment decline and inadequate financing have distracted faculties from their true mission -- the improvement of elementary and secondary education.

These conditions all detract from the relevance of teacher education to the central concerns of teachers. Prospects for immediate reform are not rosy. Yet it may be that the winds of change have begun to blow. Although they may decry its frailties, teachers nevertheless recognize that their claim to professional status rests on the quality of the preparation they receive. Teacher education is their defence against unjust evaluation and their major route to retraining, reorientation and advancement. With the potential power of self-governance behind them, teachers may yet bring teacher education to a level where all teachers may look with pride on their pre-service and in-service programs and the institutions which provided them.

Appendix A

Research Findings of Relevance to Teacher Education

Table 1. A Selective Summary of a Decade of Educational Research

Research Topics	No. of Results	Percent Positive
Time on learning	25	96.0
Innovative curricula on:		
Innovative learning	45	97.8
Traditional learning	14	35.7
Smaller classes on learning		
Pre-1954 studies	53	66.0
Pre-1954 better studies	19	84.2
Post-1954 studies	11	72.7
All comparisons	691	60.0
Behavioral instruction on:		
Learning	52	98.1
"Personalized Systems of Instruction" on learning	103	93.2
Mastery learning	30	96.7
Programmed instruction on learning	57	80.7
Adjunct questions on learning:		
After text on recall	38	97.4
After text on transfer	35	74.3
Before text on recall	13	76.9
Before text on transfer	17	23.5
Advance organizers on learning	32	37.5
Analytic revision of instruction on achievement	4	100.0
Direct instruction on achievement	4	100.0
Lecture versus discussion on:		
Achievement	16	68.8
Retention	7	100.0
Attitudes	8	86.0
Student versus instructor-centered discussion on:		
Achievement	7	57.1
Understanding	6	83.0
Attitude	22	100.0
Student- versus instructor-led discussion on:		
Achievement	10	100.0
Attitude	11	100.0
Factual versus conceptual questions on achievement	4	100.0
Specific teaching traits on achievement:		
Clarity	7	100.0
Flexibility	4	100.0
Enthusiasm	5	100.0
Task orientation	7	85.7
Use of student ideas	8	87.5
Indirectness	6	83.3
Structuring	3	100.0
Sparing criticism	17	70.6
Psychological incentives and engagement:		
Teacher's cues to student	10	100.00
Teacher reinforcement of student	16	87.5
Teacher engagement of class in lesson	6	100.00
Individual student engagement in lesson	15	100.0
Open versus traditional education on:		
Achievement	26	54.8
Creativity	12	100.0
Self-concept	17	88.2
Attitude toward school	25	92.0
Curiosity	6	100.0
Self-determination	7	85.7
Independence	19	94.7
Freedom from anxiety	8	37.5
Cooperation	6	100.0
Social psychological climate and learning:		
Cohesiveness	17	85.7
Satisfaction	17	100.0
Difficulty	16	86.7
Formality	17	64.7
Goal direction	15	73.3
Democracy	14	84.6
Environment	15	85.7
Speed	14	53.8
Diversity	14	30.8
Competition	9	66.7
Friction	17	0.0
Cliqueness	13	8.3
Apathy	15	14.3
Disorganization	17	6.3
Favoritism	13	10.0
Motivation and learning	232	97.8
Social class and learning	620	97.6
Home environment on:		
Verbal achievement	30	100.0
Math achievement	22	100.0
Intelligence	20	100.0
Reading gains	6	100.0
Ability	8	100.0

Source: Herbert J. Walberg and others. The quiet revolution in educational research. Phi Delta Kappan 61:180 Nov'79.

Appendix B

Teacher Education and Certification Policies of the Canadian Teachers' Federation

1. General

   Teachers should play a formal role in the planning, development and evaluation of teacher education programs.

2. In the training of teachers every effort should be made to ensure that the practical experience of the student is closely integrated with his/her theoretical work and of sufficient length to be effective. Accordingly, a major part of this practicum should be a continuous and uninterrupted period of experience in a school.

3. Student-Teacher Evaluation

   (a) The evaluation program should provide early and ample opportunity for determining the suitability of the student as a candidate for entry into teaching.

   (b) Self-assessment should play a significant part in the determination of suitability.

   (c) Opportunities for student-teacher self-evaluation should therefore be an integral part of the total program for evaluating student teachers.

   (d) Teachers through their organizations should be directly involved in the design of objectives and procedures for evaluating student teachers.

   (e) A variety of evaluation criteria should be considered in establishing the evaluation program.

   (f) The cooperating teacher, the faculty advisor and the student teacher should share the responsibility for evaluation of the student teacher.

   (g) All those involved in the evaluation of the student teacher should have a clear understanding of the objectives, criteria and procedures of the evaluation program.

   (h) The evaluation procedures adopted should recognize both the formative and summative evaluation roles of the cooperating teacher.

(i) Priority in the evaluation program should be given to the cooperating teacher's formative role in developing and refining the potential of prospective teachers.

(j) The program should, however, also recognize the cooperating teacher's professional responsibility to identify those who may not be suited to teaching and to participate in all procedures designed to prevent their entry into the teaching profession, provided that the procedures guarantee due process to the student teachers.

4. Cooperating Teachers

(a) Cooperating or associate teachers should be selected from those who meet criteria jointly established by teachers and faculty and who indicate a willingness to participate in the field experience program.

(b) In view of the cooperating teacher's critical role in the teacher education program, school programs should be so designed as to recognize and accommodate the roles and duties of the cooperating teacher.

(c) Teachers participating in the field experiences program should have access to the full range of facilities available within the teacher education institution.

(d) Jointly-planned programs for the preparation of cooperating teachers should be established.

5. Continuing Teacher Education

(a) Ample provision should be made for continuing education as an integral part of the teacher's career.

(b) Teacher training institutions should reorient their programs to accommodate increased emphasis on continuing education.

(c) Pre-service programs should be designed on the assumption that teacher education is continuous throughout the teacher's career.

6. Certification

(a) All teachers should hold a university degree or an accepted equivalent; and further, no teacher should be permitted to practice who does not hold an acceptable certificate of professional training.

(b) A sufficient degree of uniformity should exist in the criteria and procedures used in the licensing or certifying of teachers to permit reciprocal acceptance of certificates by all provincial and territorial authorities and teachers' organizations.

7. Selection of Student Teachers

(a) Selection criteria established for teacher education programs should include consideration of:

(i) Academic qualifications and achievement

(ii) Attitudes toward and experience with children

(iii) Communications abilities.

(b) The selection process should include:

(i) Structured interviews directed toward assessing the candidate's communication abilities and attitudes toward children.

(ii) An early program of field experiences providing an opportunity for assessment of the candidate's interest in and aptitude for a career in teaching.

(iii) A continuing program of guidance and counselling throughout the student's period of enrolment.

(c) Selection interviews for admission to teacher education programs should be conducted by teams which include both faculty members and practising teachers.

8. Limitations on Enrolment

(a) The number of places made available to teacher education candidates should be determined

(i) by considering both the overall anticipated demand for teachers and the demand in specific areas and subjects of instruction and

(ii) by assessing other occupational opportunities for which the program provides preparation.

(b) The counselling provided in faculties of education should include information on the availability of teaching positions in various specializations and on other occupations in which the skills and knowledge provided by teacher education programs would be valued.

9. Curriculum

(a) The required core content of teacher education programs should include at least the following elements:

(i) General teaching skills

(ii) Communication skills (both written and verbal)

(iii) Classroom management

(iv) Setting of instructional goals

(v) Testing and measurement, evaluation, and reporting to parents and others

(vi) Methodologies appropriate to specific subjects or areas of concentration

(vii) Teaching of the language arts

(viii) Introduction to special education and specific learning problems

(ix) Child development and learning processes

(x) Social and cultural environment of schools and communities

(xi) Historical and philosophical background to education

(xii) The teacher's legal status

(xiii) The teacher as member of an organized profession.

10. The Practicum

(a) The practicum should provide for:

(i) periods of practice early in the program, as well as later periods of extended practice

(ii) evaluation of the student's suitability for teaching (though such approaches as counselling, observation and self-evaluation)

(iii) the opportunity to plan instructional work over an extended period

(iv) The opportunity to experience a variety of decision-making situations

(v) the opportunity to use various testing, evaluation and reporting techniques

(vi) the opportunity to experience the social structure of the school and the surrounding community

(vii) the opportunity to practise in schools other that those attended as a student.

(b) Time devoted to the practicum should be not less than the equivalent of an academic semester.

11. Program Length

The minimum length of the professional component of the teacher education program should be 2 years.

12. Continuing Education Programs

(a) Teacher education institutions should develop continuing education programs which recognize a wide variety of professional improvement activities.

(b) Graduate programs should be created which would permit teachers to acquire specialized training in such areas as reading, special education and evaluation.

13. Program Diversification

During the period of declining enrolments, teacher education institutions should be encouraged to diversify their activities to permit more attention to basic research and development, strengthening of program levels, field services, and continuing education programs for practising teachers.

14. Funding of Teacher Education

Governments have a responsibility to ensure that faculties of education are sufficiently well funded to be able to engage in research and development, curriculum reform, field services and continuing education opportunities, as well as provide training for beginning teachers.

15. Encouragement of Continuing Education

(a) Professional growth should be encouraged through paid study and travel leaves, in-service activities and opportunity for retraining. Attendance at short courses as well as year-long courses should be encouraged.

(b) A significant number of teachers should at any one time be engaged in financially-supported continuing education activities.

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